

ABSTRACT

In a motor control device according to the invention, upon velocity control of a motor, a superimposed signal generating unit 9 outputs a superimposed signal i_{dh} of a repetitive waveform, such as a triangular wave or a sine wave. A d-axis current command generating unit 10 adds the superimposed signal i_{dh} generated by the superimposed signal generating unit 9d to a d-axis current command i_{dc}^0 and outputs a d-axis current command i_{dc}^* . An axial misalignment detecting unit 11 (11a, 11b, 11c, and 11d) receives the d-axis current command i_{dc}^* and a q-axis current command i_{qc}^* and outputs an axial misalignment angle estimation value $\Delta\theta^{\wedge}$. An axial misalignment correction unit 12 receives the axial misalignment angle estimation value $\Delta\theta^{\wedge}$ and an actual detected position θ_m and outputs a position after correction θ_m' . Therefore, detection and correction can be performed in real time through calculation at a given timing during a normal operation.